# CHAPTER Env-A 2400 FERROUS AND NON-FERROUS FOUNDRIES, SMELTERS, AND INVESTMENT CASTING OPERATIONS

Statutory Authority: RSA 125-C:4

PART Env-A 2401 PURPOSE

Env-A 2401.01 <u>Purpose</u>. The purpose of this chapter is to establish emissions standards for particulate matter and visible emissions from foundries, smelters, and investment casting operations.

<u>Source.</u> #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04

PART Env-A 2402 SCOPE

Env-A 2402.01 Scope. This chapter shall apply to any foundry, smelter, or investment casting operation.

<u>Source.</u> #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04

PART Env-A 2403 EMISSION STANDARDS FOR FERROUS FOUNDRIES INSTALLED PRIOR TO OR ON MAY 12, 1971

Env-A 2403.01 Emission Standards for Ferrous Foundries Installed Prior to or On May 12, 1971. For any ferrous foundry installed prior to or on May 12, 1971, no person shall cause or allow the emission of particulate matter or fumes to exceed those emission standards specified for "Existing Devices" as listed in Table 2102-1.

<u>Source.</u> #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04

Env-A 2403.02 <u>Visible Emissions Standards for Ferrous Foundries Installed Prior to or On May 12, 1971.</u>

- (a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any ferrous foundry installed prior to or on May 12, 1971 to exceed an average of 20 percent opacity for any continuous 6-minute period, except for one period of 6 continuous minutes in any 60-minute period during startup, shutdown, or malfunction.
  - (b) Opacity shall be determined in accordance with Env-A 807.

<u>Source.</u> #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04

PART Env-A 2404 EMISSION STANDARDS FOR FERROUS FOUNDRIES INSTALLED AFTER MAY 12, 1971

Env-A 2404.01 Emission Standards for Ferrous Foundries Installed After May 12, 1971.

- (a) For any ferrous foundry installed after May 12, 1971, no person shall cause or allow the emission of particulate matter or fumes to exceed those emission standards specified for "New Devices" as listed in Table 2102-1.
- (b) For any ferrous foundry installed or modified after June 15, 1974, in addition to those requirements stated in (a), above, no person shall cause or allow such a foundry to discharge into the ambient air any gas

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which contains particulate matter in excess of 50 milligrams per dry standard cubic meter, or 0.022 grains per dry standard cubic foot.

<u>Source.</u> #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04

Env-A 2404.02 Visible Emission Standards for Ferrous Foundries Installed After May 12, 1971.

- (a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any ferrous foundry installed after May 12, 1971 to exceed an average of 20 percent opacity for any continuous 6-minute period, except for one period of 6 continuous minutes in any 60-minute period during startup, shutdown, or malfunction.
  - (b) Opacity shall be determined in accordance with Env-A 807.

<u>Source.</u> #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04

PART Env-A 2405 EMISSION STANDARDS FOR NON-FERROUS FOUNDRIES, SMELTERS, OR INVESTMENT CASTINGS INSTALLED PRIOR TO OR ON FEBRUARY 18, 1972

Env-A 2405.01 <u>Non-Sulfur Emission Standards For Non-Ferrous Foundries, Smelters, and Investment Casting Operations Installed Prior to or On February 18, 1972</u>. Subject to Env-A 2405.02, below, for any non-ferrous foundry, smelter or investment casting source installed prior to or on February 18, 1972, no person shall cause or allow the emission of particulate matter or fumes to exceed those emission standards specified for "Existing Devices" as listed in Table 2102-1.

<u>Source.</u> #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04

Env-A 2405.02 <u>Calculations of Sulfur Dioxide Emission Standards for Non-Ferrous Foundries, Smelters,</u> or Investment Casting Operations Installed Prior to or On February 18, 1972.

- (a) For sulfur dioxides, the maximum allowable particulate matter emission rate from non-ferrous foundries, smelters, or investment casting operations installed prior to or on February 18, 1972 shall be calculated by the equation which is applicable for the particular kind of smelter as designated in (b) through (d), below, where:
  - (1) "X" means the total sulfur, CAS number 7704-34-9, burned in the smelter in pounds per hour;
  - (2) "Y" means the emission of sulfur dioxide, CAS number 7446-09-5, in pounds per hour;
  - (b) For copper smelters, CAS number 7440-50-8, multiply X by 0.2, as in the formula below:

Y = 0.2X

(c) For zinc smelters, CAS number 7440-66-6, raise X to the 0.85 power and multiply the result by 0.564, as in the formula below:

Y=0.564 X<sup>0.85</sup>

(d) For lead smelters, CAS number 7439-92-1, raise X to the 0.77 power, and multiply the result by 0.98, as in the formula below:

 $Y=0.98 X^{0.77}$ 

<u>Source.</u> #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04

Env-A 2405.03 <u>Visible Emission Standards for Non-Ferrous Foundries, Smelters, or Investment Casting Operations Installed Prior to or On February 18, 1972.</u>

- (a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any non-ferrous foundry, smelter, or investment casting installed prior to or on February 18, 1972 to exceed an average of 20 percent opacity for any continuous 6-minute period, except for one period of 6 continuous minutes in any 60-minute period during startup, shutdown, or malfunction.
  - (b) Opacity shall be determined in accordance with Env-A 807.

<u>Source.</u> #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04

PART Env-A 2406 EMISSION STANDARDS FOR NON-FERROUS FOUNDRIES, SMELTERS, OR INVESTMENT CASTINGS INSTALLED AFTER FEBRUARY 18, 1972

Env-A 2406.01 <u>Non-Sulfur Emission Standards For Non-Ferrous Foundries, Smelters, and Investment Casting Operations Installed After February 18, 1972</u>. Subject to Env-A 2406.02, below, for any non-ferrous foundry, smelter, or investment casting operation installed after February 18, 1972, no person shall cause or allow the emission of particulate matter or fumes to exceed those emission standards specified for "New Devices" as listed in Table 2102-1.

<u>Source.</u> #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04

Env-A 2406.02 <u>Calculation of Sulfur Dioxide Emission Standards from Non-Ferrous Foundries, Smelters and Investment Casting Operations Installed After February 18, 1972</u>. For sulfur dioxides, the maximum allowable particulate matter emission rate from non-ferrous foundries, smelters and investment casting operations installed after February 18, 1972 shall be calculated using the equation which is applicable for the particular kind of smelter, as designated in Env-A 2405.02.

<u>Source.</u> #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04

Env-A 2406.03 <u>Visible Emission Standards for Non-Ferrous Foundries, Smelters, and Investment</u> Casting Operations Installed After February 18, 1972.

- (a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any non-ferrous foundry, smelter, or investment casting operations installed after February 18, 1972, to exceed an average of 20 percent opacity for any continuous 6-minute period, except for one period of 6 continuous minutes in any 60-minute period during startup, shutdown, or malfunction.
  - (b) Opacity shall be determined in accordance with Env-A 807.

<u>Source.</u> #6428-B, eff 1-18-97 (formerly Env-A 1206); ss by #8214, eff 11-24-04

## Appendix

Provision of the Rule	Specific State or Federal Statutes or Regulations which the Rule is Intended to Implement
Env-A 2401 - 2406	RSA 125-C:4, I(a); RSA 125-C:6, II